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M 89-348A

EXAMINER

GREGORY, B

#5

ART UNIT PAPER NUMBER

2202

DATE MAILED:

09/04/92

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

This application has been examined Responsive to communication filed on _____ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. Notice of References Cited by Examiner, PTO-892.
2. Notice re Patent Drawing, PTO-948.
3. Notice of Art Cited by Applicant, PTO-1449.
4. Notice of Informal Patent Application, Form PTO-152.
5. Information on How to Effect Drawing Changes, PTO-1474.
6. _____

Part II SUMMARY OF ACTION

1. Claims 1-7 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. Claims _____ have been cancelled.
3. Claims _____ are allowed.
4. Claims 1-7 are rejected.
5. Claims _____ are objected to.
6. Claims _____ are subject to restriction or election requirement.
7. This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. Formal drawings are required in response to this Office action.
9. The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are acceptable. not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been approved by the examiner. disapproved by the examiner (see explanation).
11. The proposed drawing correction, filed on _____, has been approved. disapproved (see explanation).
12. Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has been received not been received been filed in parent application, serial no. _____ ; filed on _____
13. Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. Other

The disclosure is objected to because of the following informalities: The **BRIEF DESCRIPTION OF THE DRAWINGS** on page 6 of the Specification mentions a Figure 4 that is not present in the file wrapper.

Appropriate correction is required.

The drawings are objected to because:

- (1) The label on item 33 of Figure 1 of the drawings, as structure, must have a structural label. That is, item 33 is not a "DATA UTILIZATION"; rather, it is some sort of device or circuit; and,
- (2) Figure 4 (mentioned in the Specification) is not in the file wrapper. No new matter may be entered.

Correction is required.

Applicant is required to submit a proposed drawing correction in response to this Office action. However, correction of the noted defect can be deferred until the application is allowed by the examiner.

This application does not contain an Abstract of the Disclosure as required by 37 CFR 1.72(b). An Abstract on a separate sheet is required.

Applicant is reminded of the proper content of an Abstract of the Disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains.

If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure.

If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement.

In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof.

If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following: (1) if a machine or apparatus, its organization and operation; (2) if an article, its method of making; (3) if a chemical compound, its identity and use; (4) if a mixture, its ingredients; (5) if a process, the steps. Extensive mechanical and design details of apparatus should not be given.

Applicant is reminded of the proper language and format of an Abstract of the Disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said", should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which

can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claims 1-7 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On lines 5-6 of independent claim 1, the language "producing an identical sequence ... at both said transmitter and receiver" is indefinite and unclear as to: (1) how one sequence can be produced at two different places; (2) why "said" does not precede "receiver"; and, (3) what the sequence is identical with. Perhaps, it is meant that two sequences are produced (one at the receiver and one at the transmitter), and both of these sequences are identical. Similarly, on lines 8-9 of independent claim 6, the language "generating an identical sequence ... said remote locations" is indefinite and unclear as to: (1) how one sequence can be produced at two different places; and, (2) what the sequence is identical with. Both uses of "the current key value" in claim 1 lack antecedent basis. On lines 7-9 of claim 1, the language "produced at a time dependent upon a predetermined characteristic of the data being transmitted over said link" is indefinite and unclear as to: (1) whether the characteristic of the data is of data still at the transmitter or data which is in the process of propagating to the receiver; (2) whether the new key is a function of the characteristic of the data; and, (3) whether the characteristic of the data merely determined the time of the

generation of the new key. Similarly, on lines 8-12 of independent claim 6, the language "generating an identical sequence of pseudo-random key values based on said seed value at each of said remote locations ... over said link" is indefinite and unclear as to: (1) whether the characteristic of the data is of data still at the transmitter or data which is in the process of propagating to the receiver; (2) whether the new key is a function of the characteristic of the data; and, (3) whether the characteristic of the data merely determined the time of the generation of the new key. On lines 2-3 of dependent claim 2, it is unclear what the relationship is between "a new key value" and the earlier-mentioned "each new key value" (line 7 of claim 1). Are they the same? If they are the same, why does the use in claim 2 not use "said"? In any case, the language must be clear as to the relationship between the two. On line 3 of dependent claim 3, "said key value" lacks clear antecedent basis. On line 2 of dependent claim 5, the language "like random number seed values" is indefinite and unclear as to what is meant by "like". Does "like" mean the "values" are all equal? On lines 14 and 16 of claim 6, both uses of "the current key value" lack antecedent basis. On line 3 of dependent claim 7, it is unclear what location is referred to by "that location". Throughout claims 1-7, the terms "random" and "pseudo-random" are used interchangeably; this mixed use is unclear. First, the quantities in question are always pseudorandom since they can not be perfectly random. Second, the mixed use of the terms "random"

and "pseudo-random" incorrectly implies that the terms are equivalents. Dependent claims 2-5 and 7 are indefinite and unclear in that they depend from indefinite and unclear independent claims 1 and 6.

Claims 1 and 6 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 112.

Claims 2-5 and 7 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112 and to include all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**THE PRIOR ART HAS BEEN CONSIDERED INSOFAR AS
INDEFINITE AND UNCLEAR CLAIMS 1-7 COULD BE
UNDERSTOOD.** Shima ('327); Okamoto ('716); and, Naruse et al ('919) are all of interest as showing systems and methods similar to Applicant's invention; however, neither Shima ('327); Okamoto ('716); nor, Naruse et al ('919) shows Applicant's claimed method step and means for generating pseudorandom key values which "are produced at a time dependent upon a predetermined characteristic of the data being transmitted" inter alia.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Bernarr Gregory whose telephone number is (703)-308-0479. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)-308-0766.

Bernarr E. Gregory
BERNARR E. GREGORY
EXAMINER
ART UNIT 222-2202